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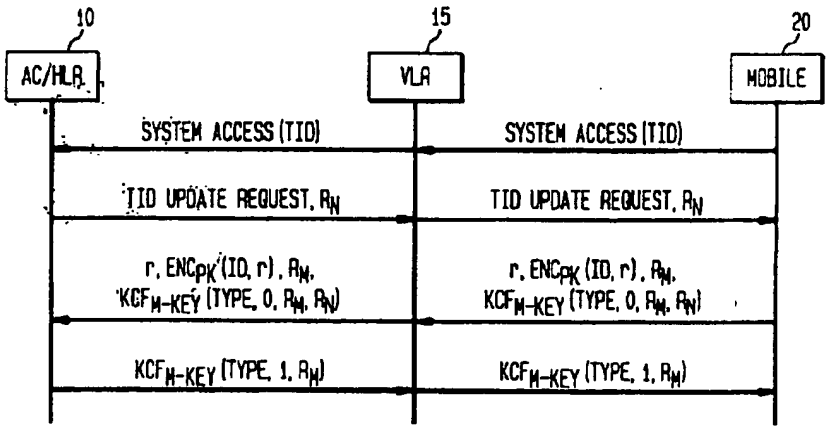
(54) Method for protecting mobile anonymity

(57) In the method for protecting mobile anonymity, the network sends a temporary mobile identifier (TID) update request to the mobile along with a challenge. In response, the mobile encrypts its permanent ID through public key encryption using the public key of the network, and sends the encryption result to the network. Also, the mobile generates a second challenge, and a first challenge response. The first challenge response is generated by performing a keyed cryptographic function (KCF) on the first and second challenges using a key. The mobile sends the second challenge and the first challenge response to the network with the encrypted permanent ID. After decrypting the permanent ID, the network accesses the key associated with mobile using the permanent ID. Next, using the key, the network authenticates the mobile using the second challenge and the first challenge response. If authenticated, the network calculated a TID for the mobile using the first and second challenges. The network further generates and sends a second challenge response to the mobile. If the mobile authenticates the network based on the second challenge response, then the mobile calculates the TID in the same manner as did the network.

FIG. 2



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EUROPEAN SEARCH REPORT

Application Number
EP 99 30 6466

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A	WO 98 26538 A (NOKIA TELECOMMUNICATIONS OY ;JUOPPERI JARI (FI)) 18 June 1998 (1998-06-18) * page 6, line 25 - page 13, line 16 * * figures *	1-18	TECHNICAL FIELDS SEARCHED (Int.Cl.7) H04Q
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	16 November 2000	Psatha, H

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